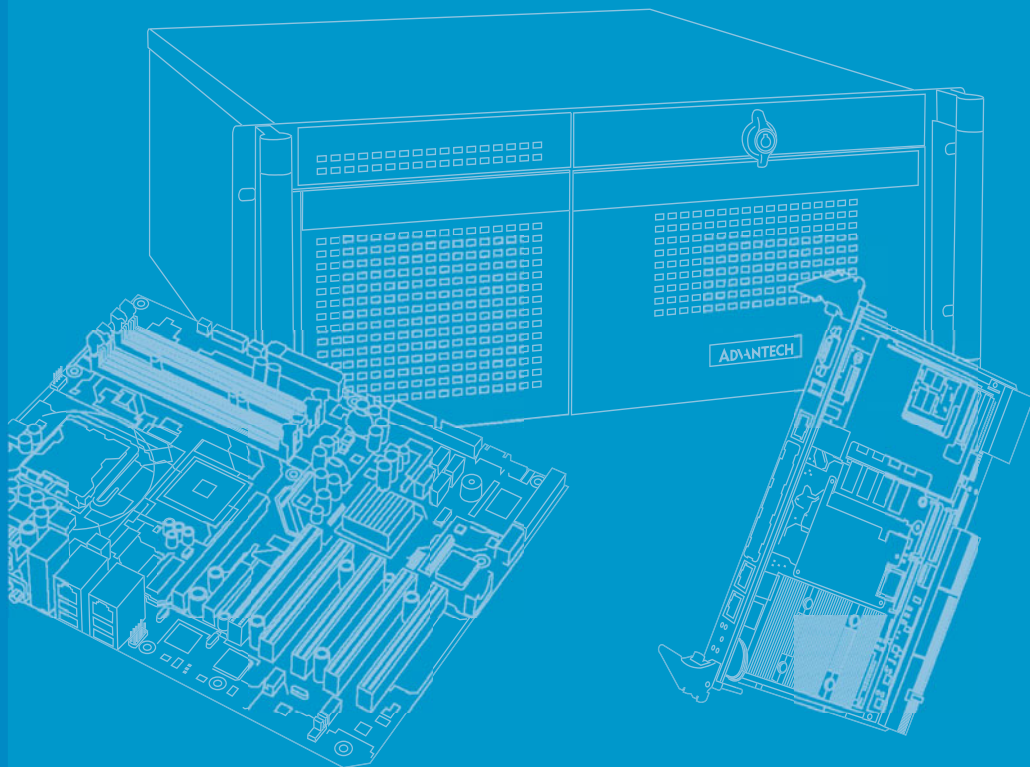


User Manual



AdvDVP Series Demo

ADVANTECH

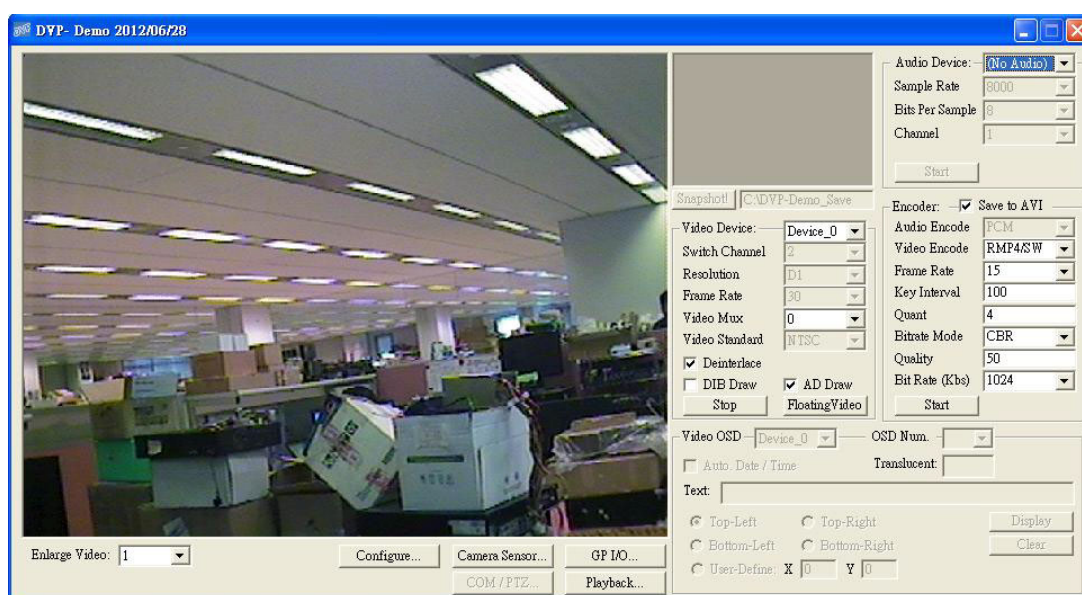
Enabling an Intelligent Planet

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Demo Program Functionality

Below is demo program window. The left side panels are the preview windows of video inputs. The right/bottom side panels are the function parameter settings.



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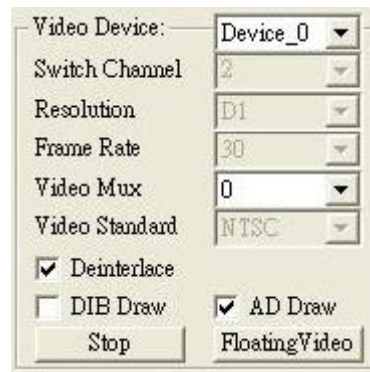
Chapter 1

Video

Selects and sets the video devices.

START / STOP the video capture and preview.

Selects different video drawing methods, DIB Draw, DirectShow, and DirectDraw



1.1 Device

Selects the number of video device to be capture and preview.



1.2 Switch Channels

Selects the number of channels to be switched for selected video device.

Please refer to "AdvDVP_GetVideoSwitching"



1.3 Resolution

Sets/Gets the video capture resolution for specific channel.

Please refer to "AdvDVP_SetResolution / AdvDVP_GetResolution".

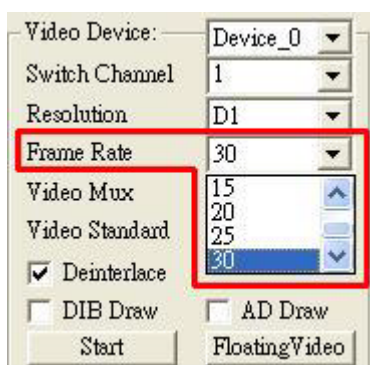
Notice: For the resolution of VGA or D1, the capture video will have the interlace effect on the video image. In other words, there will be lines in the capture image especially when the targeted image is moving. To eliminate this effect, user might need to set the resolution down to 640x240 and use specific algorithms to compensate the image interlace between the scanning even field image and odd field image. For CIF/320x240 resolution, there will be no interlace effect.



1.4 Frame Rate

Sets/Gets the video capture frame rate for specific channel.

Please refer to "AdvDVP_SetFrameRate(...) / AdvDVP_GetFrameRate"



1.5 Video Mux

Selects the input of video device.

Please refer to

"AdvDVP_GetVideoInput / AdvDVP_SetVideoInput / AdvDVP_GetVideoSwitching".

If 'Switch Channel' is not '1', this item is disabled.



1.6 Video Standard

Sets the video signal standard of video device.

Please refer to "AdvDVP_SetVideoFormat / AdvDVP_GetVideoFormat"



1.7 Deinterlace

Sets if need to do de-interlace or not

Please refer to "AdvDVP_SetDeinterlace / AdvDVP_GetDeinterlace"



1.8 DIB Draw

Sets to be used the drawing method of DIBDraw

Please refer to "AdvDVP_Start / AdvDVP_Stop"



1.9 AD Draw

Sets to be used the drawing method of DirectDraw

Please refer to "AdvDVP_Start / AdvDVP_Stop"



1.10 Start / Stop

Starts/Stops the video capturing on a specific channel

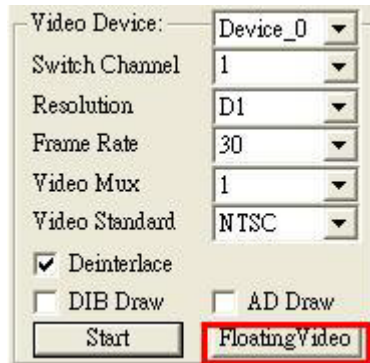
Please refer to "AdvDVP_Start / AdvDVP_Stop"



1.11 Floating Video

Sets the preview window to be 'always on top' and 'popup'. Drags the border for enlarge and shrink the video window size.

Please refer to "AdvDVP_SetVideoZoom"



Chapter 2

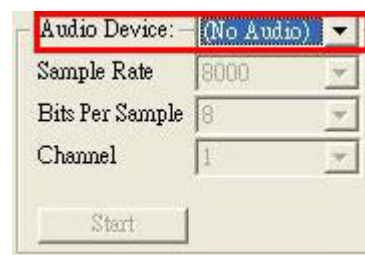
Audio Device

Selects and sets the audio devices.
START/STOP the audio capture and play.



2.1 Device

Selects the number of video device to be capture and preview.



2.2 Sample Rate

Sets/Gets the audio sample rate, sample per second.

Please refer to "AdvDVP_SetAudioFormat / AdvDVP_GetAudioFormat"



2.3 Bits Per Sample

Sets/Gets the audio bits per sample

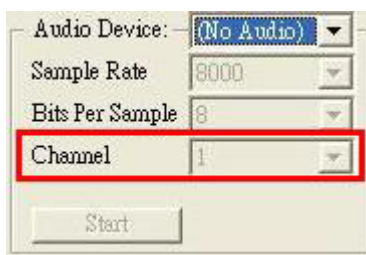
Please refer to "AdvDVP_SetAudioFormat / AdvDVP_GetAudioFormat"



2.4 Channel

Sets/Gets the audio channel, 1 is mono, 2 is stereo.

Please refer to "AdvDVP_SetAudioFormat / AdvDVP_GetAudioFormat"



2.5 Start / Stop

Starts/Stops audio capturing and playing.

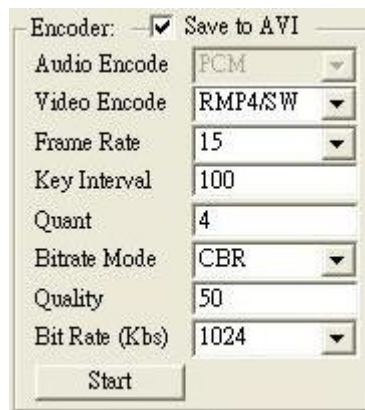
Please refer to "AdvDVP_StartAudio / AdvDVP_StopAudio"



Chapter 3

Encoder

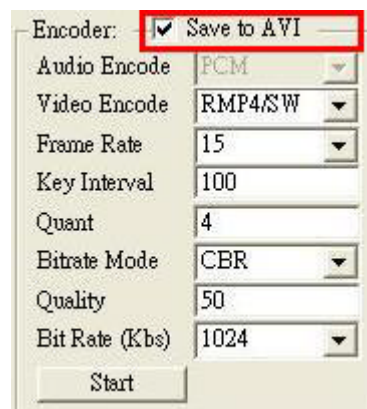
Selects and sets the audio and video compression settings.
START / STOP the media compression and save to file.



3.1 Save to AVI

Saves the video / audio compression data to .avi file.

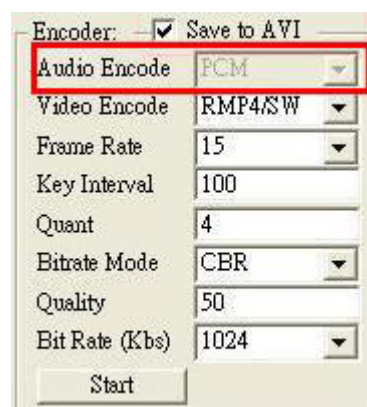
Please refer to "AdvDVP_CreateAVIFile / AdvDVP_WriteAVIFile /
AdvDVP_CloseAVIFile / AdvDVP_AudioToAVIFile"



3.2 Audio Encode

Sets/Gets the audio compression format

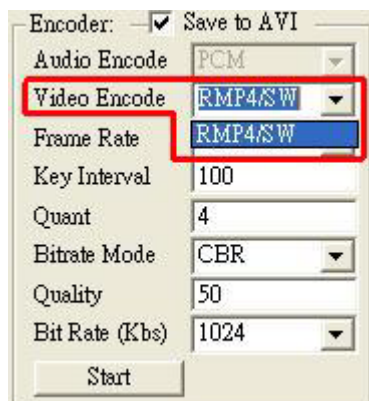
Please refer to "AdvDVP_GetAudioCompressFormats /
AdvDVP_GetCurAudioCompressFormat"



3.3 Video Encode

Sets / Gets the video compression format

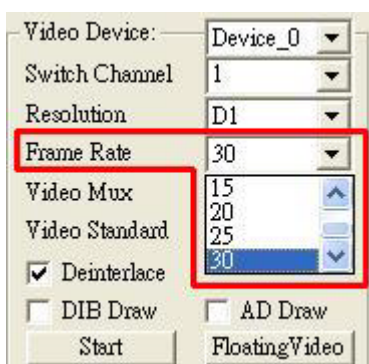
Please refer to "AdvDVP_SetVideoCompressFormat /
AdvDVP_GetVideoCompressFormats /
AdvDVP_GetCurVideoCompressFormat"



3.4 Frame Rate

Sets / Gets the video compression frame rate

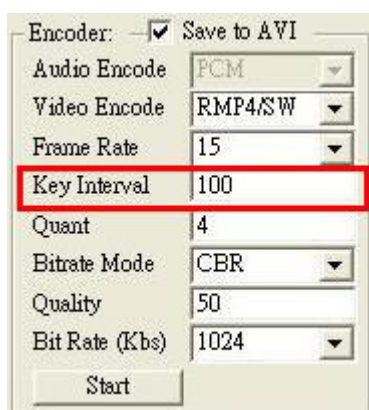
Please refer to "AdvDVP_SetCompressAttr / AdvDVP_GetCompressAttr"



3.5 Key Interval

Sets / Gets the video compression I frame interval

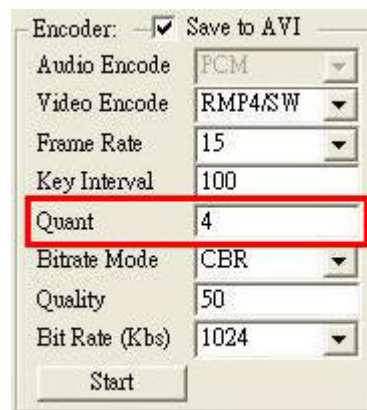
Please refer to "AdvDVP_SetCompressAttr / AdvDVP_GetCompressAttr"



3.6 Quant

Sets / Gets the video compression quant

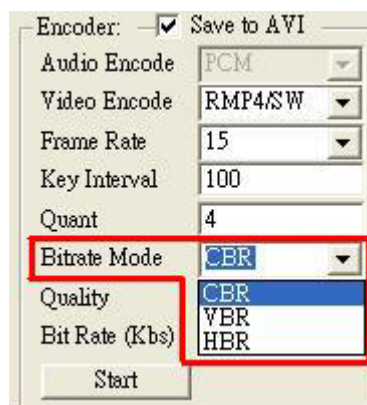
Please refer to "AdvDVP_SetCompressAttr / AdvDVP_GetCompressAttr"



3.7 Bitrate Mode

Sets / Gets the video compression bit rate mode.

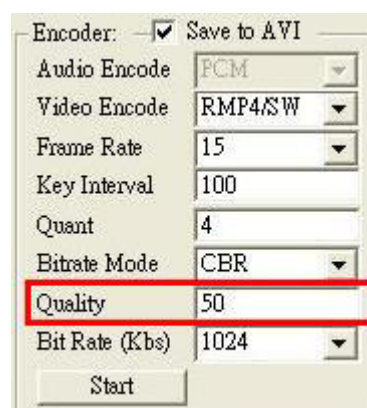
Please refer to "AdvDVP_SetCompressAttr / AdvDVP_GetCompressAttr"



3.8 Quality

Sets / Gets the video compression quality, only for CBR mode

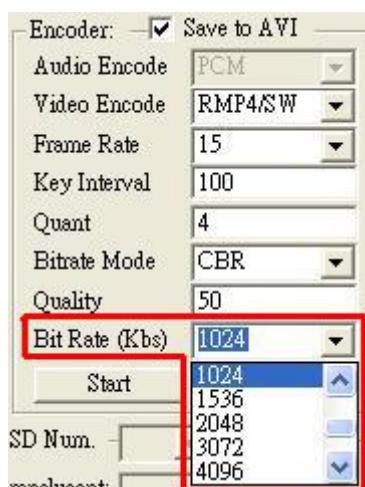
Please refer to "AdvDVP_SetCompressAttr / AdvDVP_GetCompressAttr"



3.9 Bit Rate(Kbs)

Sets / Gets the video compression bit rate(CBR), in K-bits

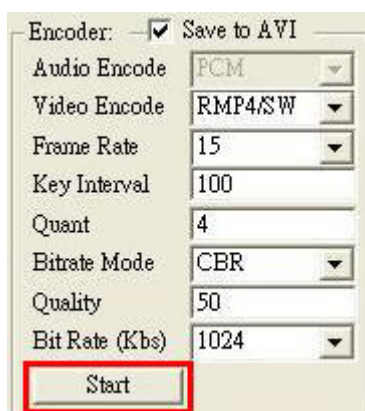
Please refer to "AdvDVP_SetCompressAttr / AdvDVP_GetCompressAttr"



3.10 Start / Stop

Starts / Stops media compression

Please refer to "AdvDVP_StartCompress / AdvDVP_StopCompress / AdvDVP_SetCompressCallback"



Chapter 4

Video OSD

Selects and sets the Text-On-Video.



The screenshot shows a 'Video OSD' configuration window. At the top, there is a label 'Video OSD' followed by a dropdown menu currently set to 'Device_0'. To the right of this is another dropdown menu labeled 'OSD Num.'. Below these, there is a checkbox for 'Auto. Date / Time' and a text field for 'Translucent:'. A large text input field is labeled 'Text:'. Below the text field, there are four radio button options for text placement: 'Top-Left' (selected), 'Top-Right', 'Bottom-Left', and 'Bottom-Right'. At the bottom, there is a 'User-Define' option with 'X' and 'Y' coordinates, both set to '0'. On the right side of the window, there are two buttons: 'Display' and 'Clear'.

4.1 Device

Selects and sets the video device to enable OSD or not



This screenshot is identical to the one above, but the 'Device_0' dropdown menu in the 'Video OSD' section is highlighted with a red rectangular box to indicate it is the focus of this section.

4.2 OSD Num

Selects the OSD number

Please refer to "AdvDVP_GetNumOfOSD/AdvDVP_SetTextOSDEx"



This screenshot is identical to the one above, but the 'OSD Num.' dropdown menu is highlighted with a red rectangular box to indicate it is the focus of this section.

4.3 Auto. Date/Time

Enable / Disable to show date/time on the video

Please refer to "AdvDVP_GetNumOfOSD/AdvDVP_SetTextOSDEx"

The screenshot shows the 'Video OSD' configuration window. At the top, there are dropdown menus for 'Device_0' and 'OSD Num.'. Below these, the 'Auto. Date / Time' checkbox is highlighted with a red rectangle. To its right is a 'Translucent' input field. Below the checkbox is a 'Text' input field. Further down, there are radio buttons for 'Top-Left', 'Top-Right', 'Bottom-Left', 'Bottom-Right', and 'User-Define'. The 'User-Define' option has associated 'X' and 'Y' input fields. At the bottom right, there are 'Display' and 'Clear' buttons.

4.4 Translucent

Set the text translucent, the range is 0 ~ 255

Please refer to "AdvDVP_GetNumOfOSD/AdvDVP_SetTextOSDEx"

This screenshot is similar to the previous one, but the 'Translucent' input field is highlighted with a red rectangle. The 'Auto. Date / Time' checkbox is now unchecked.

4.5 Text

Sets the text to show on the video

Please refer to "AdvDVP_GetNumOfOSD/AdvDVP_SetTextOSDEx"

This screenshot shows the 'Text' input field highlighted with a red rectangle. The 'Auto. Date / Time' checkbox remains unchecked, and the 'Translucent' field is empty.

4.6 Top-Left

Sets the text location to top left

Please refer to "AdvDVP_GetNumOfOSD/AdvDVP_SetTextOSDEx"



The screenshot shows the 'Video OSD' configuration window. At the top, there are dropdown menus for 'Device_0' and 'OSD Num.'. Below these are checkboxes for 'Auto. Date / Time' and a 'Translucent' checkbox. A 'Text:' input field is present. In the center, there are five radio button options: 'Top-Left' (which is selected and highlighted with a red rectangle), 'Top-Right', 'Bottom-Left', 'Bottom-Right', and 'User-Define:'. The 'User-Define' option has associated 'X' and 'Y' input fields. To the right of the radio buttons are 'Display' and 'Clear' buttons.

4.7 Top-Right

Sets the text location to top right

Please refer to "AdvDVP_GetNumOfOSD/AdvDVP_SetTextOSDEx"



This screenshot is identical to the previous one, but the 'Top-Right' radio button is now selected and highlighted with a red rectangle.

4.8 Bottom-Left

Sets the text location to bottom left

Please refer to "AdvDVP_GetNumOfOSD/AdvDVP_SetTextOSDEx"



This screenshot is identical to the previous ones, but the 'Bottom-Left' radio button is now selected and highlighted with a red rectangle.

4.9 Bottom-Right

Sets the text location to bottom-right

Please refer to "AdvDVP_GetNumOfOSD/AdvDVP_SetTextOSDEx"

The screenshot shows the 'Video OSD' configuration window. At the top, there are dropdown menus for 'Device_0' and 'OSD Num.'. Below these are checkboxes for 'Auto. Date / Time' and 'Translucent:'. A 'Text:' input field is present. In the center, there are five radio buttons for text positioning: 'Top-Left', 'Top-Right', 'Bottom-Left', 'Bottom-Right', and 'User-Define:'. The 'Bottom-Right' radio button is selected and highlighted with a red rectangle. To the right of the radio buttons are 'Display' and 'Clear' buttons. At the bottom, there are input fields for 'X' and 'Y' coordinates, both set to '0'.

4.10 User-Define

Sets the text location by user define

Please refer to "AdvDVP_GetNumOfOSD/AdvDVP_SetTextOSDEx"

This screenshot is identical to the one in section 4.9, showing the 'Video OSD' configuration window. In this instance, the 'User-Define:' radio button is selected and highlighted with a red rectangle. The 'X' and 'Y' coordinate fields at the bottom are still set to '0'.

4.11 Display

Sets / Enable the text OSD display

Please refer to "AdvDVP_SetTextOSDEx"

This screenshot is identical to the one in section 4.9, showing the 'Video OSD' configuration window. In this instance, the 'Display' button is highlighted with a red rectangle. The 'Bottom-Right' radio button is still selected.

4.12 Clear

Clears / Disable text OSD display

Please refer to "AdvDVP_ClearTextOSDEx"



The screenshot shows a 'Video OSD' configuration window. At the top, there are two dropdown menus: 'Device_0' and 'OSD Num.'. Below these are two checkboxes: 'Auto. Date / Time' and 'Translucent'. A 'Text:' label is followed by a text input field. Below the text field are five radio button options: 'Top-Left', 'Top-Right', 'Bottom-Left', 'Bottom-Right', and 'User-Define'. The 'User-Define' option has two sub-inputs: 'X' and 'Y', both with '0' entered. To the right of these options are two buttons: 'Display' and 'Clear'. The 'Clear' button is highlighted with a red rectangular border.

Chapter 5

Snapshot

5.1 Snapshot

Gets the still image data and saves to the specific path.

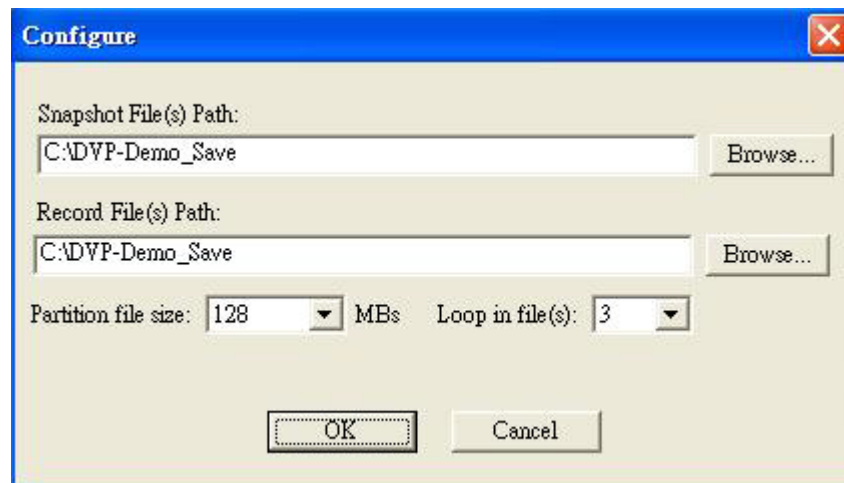


Chapter 6

Configure

6.1 Configure

Sets the path of video files folder and files size.



Chapter 7

Camera Sensor

Sets/Gets the brightness, contrast, saturation and hue of specific channel. Please refer to chapter. The range is 0 ~ 100.



7.1 Brightness

Sets / Gets the brightness value of a specified capture port
Please refer to "AdvDVP_SetBrightness / AdvDVP_GetBrightness"

7.2 Contrast

Sets / Gets the contrast value of a specified capture port
Please refer to "AdvDVP_SetContrast / AdvDVP_GetContrast"

7.3 Saturation

Sets / Gets the saturation value of a specified capture port
Please refer to "AdvDVP_SetSaturation / AdvDVP_GetSaturation"

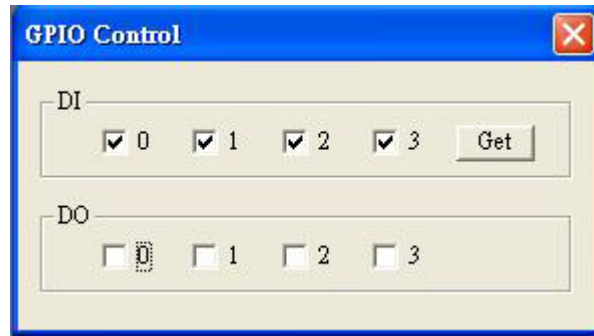
7.4 Hue

Sets / Gets the hue value of a specified capture port
Please refer to "AdvDVP_SetHue / AdvDVP_GetHue"

Chapter 8

GPIO

Gets a specified DI status or Sets a specified DO status.



8.1 DI

Please refer to "AdvDVP_GPIOSetData / AdvDVP_GPIOGetData"

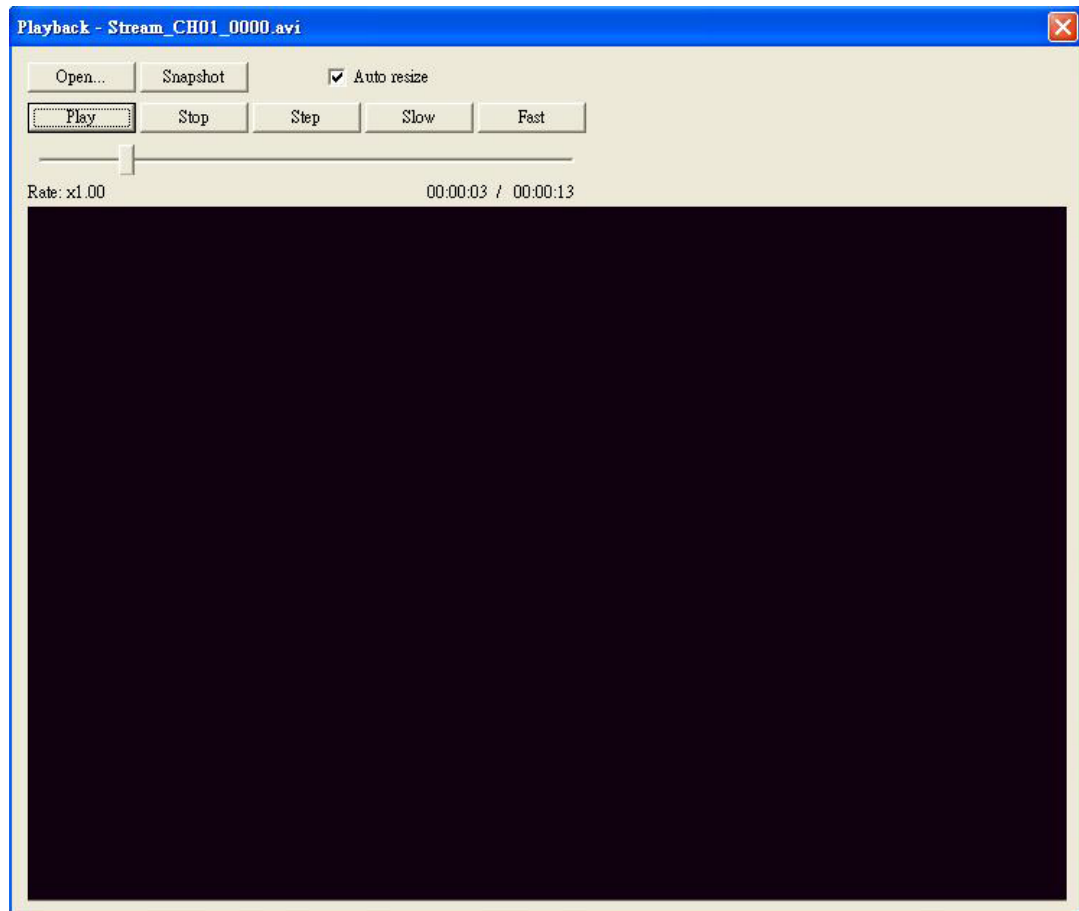
8.2 DO

Please refer to "AdvDVP_GPIOSetData / AdvDVP_GPIOGetData"

Chapter 9

Playback

Playback the video files.



9.1 Open

Opens the source video file and initializes the video player
Please refer to "AdvDVP_OpenFile / AdvDVP_CloseFile"

9.2 Play / Pause

Play / Pause the file that has been opened
Please refer to "AdvDVP_Play / AdvDVP_Pause"

9.3 Stop

Stop the file that is playing
Please refer to "AdvDVP_Stop"

9.4 Step

Make the video to step forward one frame
Please refer to "AdvDVP_PlayStep"

9.5 Slow

Slow the current play speed by one time, 4 times at most
Please refer to "AdvDVP_Slow"

9.6 Fast

Improves the current play speed by one time, 4 times at most
Please refer to "AdvDVP_Fast"

9.7 Snapshot

Get the image data and save it to the specific path
Please refer to "AdvDVP_GetCurFrameBuffer"

9.8 Auto resize

Sets to adjust the window size of video automatically.



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